AMENDMENTS TO THE CLAIMS

Claim 1 (previously presented)

A colloidal dispersion, in an organic solvent, of microfibrils and/or microcystal of a fibrillar organic substance selected from the group consisting of cellulose, chitin, and polysaccharides containing in addition at least one compound possessing a hydrophilic part and a hydrophobic part.

Claim 2 (currently amended)

A dispersion of claim 1, wherein the compound possessing a hydrophilic part and a hydrophobic part is selected from the group consisting of surfactant, a stabilizing polymer, a co-surfactant and mixtures thereof~~, especially and a mixture of surfactant and co-surfactant~~.

Claim 3 (previously presented)

A dispersion of claim 1 of microfibrils and/or microcrystals of cellulose.

Claim 4 (previously presented)

A dispersion of claim 1 wherein the organic solvent has a dielectric constant that is less than or equal to approximately 37.5, and/or the organic solvent is selected from the group consisting of

- aliphatic hydrocarbons,
- aromatic hydrocarbons,
- chlorine-containing solvents,

- ketones having 3 to 10 carbon atoms,

- polymerizable vinylic compounds,

- epoxides,

- primary, secondary or tertiary amines,

- alkyl acetates having 1 to 10 carbon atoms,

- ethers with an alkyl chain having of 1 to 20 carbon atoms or an aromatic chain,

- aldehydes, carboxylic acids and/or their acylated derivatives and anhydrides, the polyacids with an alkyl chain having 1 to 20 carbon atoms or an aromatic chain,

- primary, secondary or tertiary alcohols, with aliphatic chain of 1 to 10 carbon atoms, and/or aromatic chain,

- tetrahydrofuran (THF), pyridine, dimethylformamide, (DMF), dimethylacetamide (DMAc),

- mineral and/or organic oils, of synthetic or natural origin, or mixtures thereof.

Claim 5 (previously presented)

A dispersion of claim 1 wherein the quantity of cellulose varies from about 0.01 wt % to about 50 wt % relative to the total weight of the dispersion.

Claim 6 (previously presented)

A dispersion of claim 1 wherein the compound possessing a hydrophilic or hydrophobic part is:

(a) a surfactant possessing:

- a hydrophilic part capable of being adsorbed on the microfibrils and/or microcyrstals of the compound selected from the group consisting of cellulose, chitin and polysaccharides and containing oxyethylene groups,

- a hydrophobic part, containing a carbon chain of at least 6 carbon atoms, aromatic or non-aromatic, and capable of interacting with the solvent,

the said surfactant being selected from the group consisting of

cationic surfactants,

anionic surfactants,

amphoteric surfactants possessing a quaternary ammonium group and an anionic phosphoric group, and

neutral surfactants,

(b) or, a stabilizing polymer possessing from about 5 to about 200 hydrophilic units and from about 10 to about 200 hydrophobic units.

Claim 7 (previously presented)

A dispersion of claim 2 wherein the co-surfactant possesses:

- a hydrophilic part that is compatible with the hydrophilic part of the compound possessing a hydrophilic part and a hydrophobic part, and

- a hydrophobic part that is compatible with the hydrophobic part of the compound possessing a hydrophilic part and a hydrophobic part,

- the co-surfactant making it possible, for the microfibrils and/or microcrystals of the fibrillar organic substance as defined in claim 1 to be rendered compatible with the organic solvent,

the said co-surfactant being selected from the group consisting of alcohols having 4 to 18 carbon atoms, carboxylic acids having 4 to 18 carbon atoms, aldehydes having from 4 to 18 carbon atoms or amines having from 4 to 18 carbon atoms.

Claim 8 (previously presented)

A dispersion of claim 1 containing:

- cellulose microfibrils and/or microcrystals, in a quantity varying from about 0.01 wt % to about 50 wt % relative to the total weight of the dispersion,

- an organic solvent in a quantity varying from about 50 wt % to about 99.9 wt % relative to the total weight of the dispersion,

- a surfactant in a quantity varying from about 0.01 wt % to about 50 wt % relative to the total weight of the dispersion,

- and optionally a co-surfactant in a quantity varying from about 0 wt % to about 20 wt % relative to the total weight of the dispersion.

Claim 9 (previously presented)

A dispersion of claim 1 wherein it exhibits at least one of the following properties:

- it does not form aggregates (it is non-flocculent),

- it is birefringent in shear, and

- it is stable for periods ranging from at least one minute to at least 12 months.

Claim 10 (previously presented)

A method of preparation of a dispersion of claim 1 comprising:

(1) forming an aqueous dispersion of microfibrils and/or microcrystals of a fibrillar organic substance selected from the group consisting of cellulose, chitin, and polysaccharide with a compound possessing a hydrophilic part and a hydrophobic part selected from the group consisting of a surfactant, a stabilizing polymer, a co-surfactant or mixtures thereof,

(2) removing the water from the aqueous dispersion as obtained in the preceding stage to obtain a dry mixture of surfactant and/or of stabilizing polymer and optionally co-surfactant, and a fibrillar organic substance selected from the group consisting of cellulose, chitin, and polysaccharides,

(3) and dispersing the mixture as obtained in the preceding stage in an organic solvent.

Claim 11 (previously presented)

The method of preparation of claim 10, wherein

(1) an aqueous dispersion of microfibrils and/or microcrystals of cellulose is mixed with a surfactant selected from the group consisting of BNA,

polyoxyethylene sorbitan trioleate and didecyidimethyl ammonium bromide, the weight ratio between the said surfactant and said microfibrils and/or microcrystals of cellulose varying from about 0.1:1 to about 20:1, to obtain an aqueous colloidal dispersion of microfibrils and/or of microcrystals of cellulose,

(2) the water is eliminated from the aqueous dispersion as obtained in the preceding stage to obtain a dry mixture of surfactant and cellulose, the said mixture containing from about 5 wt % to about 95 wt % of surfactant relative to the total weight of the mixture, and from about 5 wt % to about 95 wt % of cellulose relative to the total weight of the mixture,

(3) the mixture as obtained in the preceding state is dispersed in an organic solvent as defined in claim 4,

until a dispersion of cellulose microfibrils and/or microcrystals is obtained for which the percentage by weight of adsorption between the said surfactant and the said cellulose microfibrils and/or microcrystals varies from about 0.1 to about 20.

Claim 12 (cancelled)

Claim 13 (previously presented)

An organic solvent having a dielectric constant that is less than or equal to approximately 37.5 and/or the organic solvent is selected from the group consisting of

- aliphatic hydrocarbons,

- aromatic hydrocarbons,

- chlorine-containing solvents,

- ketones having 3 to 10 carbon atoms,

- polymerizable vinylic compound,

- epoxides,

- primary, secondary or tertiary amines,

- alkyl acetates having 1 to 10 carbon atoms,

- ethers with an alkyl chain having 1 to 20 carbon atoms or an aromatic chain,

- aldehydes, carboxylic acids and/or their acylated derivatives and anhydrides, the polyacids with an alkyl chain having 1 to 20 carbon atoms or an aromatic chain,

- primary, secondary or tertiary alcohols, with an aliphatic chain having 1 to 1- carbon atoms, and/or an aromatic chain,

- tertrahydrofuran (THF), pyridine, dimethylformamide (DMF), dimethylacetamide A(DMAc),

- mineral and/or organic oils of synthetic or natural origin,

or mixtures thereof,

wherein it is thickened and/or viscous, and containing:

- microcrystals and/or microfibrils of a fibrillar organic substance selected from the group consisting of cellulose, chitin, and polysaccharides,

- a compound possessing a hydrophilic part and a hydrophobic part selected from the group consisting of a surfactant, a stabilizing polymer, a co-surfactant and mixtures thereof.

Claims 14-16 (cancelled)

Claim 17 (previously presented)

A colloidal dispersion of claim 1 wherein the polysaccharide is selected from the group consisting of ß 1 → 3 glucan, ß 1 → 3 xylan and ß 1 → 4 mannan.

Claim 18 (previously presented)

A colloidal dispersion of claim 2 wherein the compound possessing a hydrophilic part and a hydrophobic part is a mixture of surfactant and co-surfactant.

Claim 19 (previously presented)

In a gel, liquid crystal or material containing cellulose microfibrils and/or microcrystals, the improvement comprising using an aqueous dispersion of claim 1.

Claim 20 (previously presented)

In a preparation of a material containing microfibrils and/or microcrystals of cellulose, the improvement comprising using a dried mixture of the composition of claim 19.